AMENDMENTS TO THE CLAIMS:

Please amend claims 8 and 12 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-7. (Canceled)

8. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film containing silicon and nitrogen on a semiconductor substrate;

forming a film which must be processed and which contains silicon on the insulating film;

processing the film which must be processed to cause a portion of the insulating film to be exposed to the outside; and

lowering a surface of the semiconductor substrate under a part of the insulating film relative to a surface of the semiconductor substrate under the film which is processed to cause the portion of the insulating film to be exposed to the outside by applying a thermal oxidation process to a semiconductor structure obtained owing to the above steps ~~of an oxidation process~~, the thermal oxidation process using an oxidizing gas containing one of ozone and oxygen radicals, the oxygen radicals being generated by remote plasma oxidizing method or by reacting a first gas containing oxygen and a second gas containing hydrogen, and a

concentration of nitrogen of the part of the insulating film under an edge portion of the film being decreased by the thermal oxidation process.

9. (Original) A method of manufacturing a semiconductor device according to claim 8, wherein the insulating film is one of a silicon oxide film containing nitrogen and a silicon nitride film.

10. (Original) A method of manufacturing a semiconductor device according to claim 8, wherein the insulating film is a gate insulating film, and the film which must be processed is processed to form a gate electrode.

11. (Original) A method of manufacturing a semiconductor device according to claim 8, wherein the insulating film is formed in such a manner that the concentration of nitrogen at an interface of the insulating film with the semiconductor substrate realized before the oxidation process is performed is 5×10^{13} cm^{-2} or higher.

12. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film containing silicon and nitrogen on a semiconductor substrate;

forming a film which must be processed and which contains silicon on the insulating film;

processing the film which must be processed ~~such that~~ to cause a portion of the insulating film ~~is~~ to be exposed to the outside;

lowering a surface of the semiconductor substrate under a part of the insulating film ~~than~~ relative to a surface of the semiconductor substrate under the film which is processed to cause the portion of the insulating film to be exposed to the outside by applying a thermal oxidation process to a semiconductor structure obtained in the above steps ~~of an oxidation process~~, the thermal oxidation process using an oxidizing gas containing one of ozone and oxygen radicals, the oxygen radicals being generated by remote plasma oxidizing method or by reacting a first gas containing oxygen and a second gas containing hydrogen, and a concentration of nitrogen of the part of the insulating film under an edge portion of the film being decreased by the thermal oxidation process; and

subjecting the semiconductor structure subjected to the ~~oxidizing~~ oxidation process to at least one of a ~~nitriding~~ nitridation process and an additional oxidation process.

13. (Original) A method of manufacturing a semiconductor device according to claim 12, wherein the insulating film is one of a silicon oxide film containing nitrogen and silicon nitride film.

14. (Original) A method of manufacturing a semiconductor device according to claim 12, wherein the insulating film is a gate insulating film, and the film which must be processed is processed to form a gate electrode.

15. (Original) A method of manufacturing a semiconductor device according to claim 12, wherein the insulating film is formed in such a manner that the concentration of nitrogen at an interface of the insulating film with the semiconductor substrate realized before the oxidation process is performed is not less than 5×10^{13} cm^{-2}.

16. (Withdrawn) A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film containing a silicon nitride film on a film which must be processed and which includes a silicon film;

processing the insulating film by using lithography and etching to form a pattern composed of the insulating film;

subjecting the pattern in an atmosphere containing one of oxygen radicals and ozone to convert the exposed surface of the silicon nitride film into a silicon oxide film;

fining the pattern by removing the silicon oxide film; and

processing the film which must be processed by transferring the fined pattern to the film which must be processed.

17. (Withdrawn) A method of manufacturing a semiconductor device according to claim 16, wherein

the insulating film is etched in such a manner that the surface of the film which must be processed is not exposed to the outside to convert the exposed surface of the silicon nitride film into a silicon oxide film, and then silicon oxide film is removed to form the pattern,

a portion of the insulating film constituting the first pattern which has a small thickness is removed to form the fine pattern, and

the fine pattern is used as a mask to etch the film which must be etched to transfer the pattern to the film which must be processed.

18. (Withdrawn) A method of manufacturing a semiconductor device according to claim 16, wherein the insulating film further contains a silicon oxide film, and the silicon oxide film is formed below the silicon nitride film.

19. (Withdrawn) A method of manufacturing a semiconductor device according to claim 16, wherein the film which must be processed is formed into a gate electrode.

20. (Previously Presented) A method of manufacturing a semiconductor device according to claim 8, wherein the thermal oxidation process using the oxygen radicals is performed at not lower than 900°C.

21. (Previously Presented) A method of manufacturing a semiconductor device according to claim 12, wherein the thermal oxidation process using the oxygen radicals is performed at not lower than 900°C.